UNIVERSITY OF CALIFORNIA PUBLICATIONS—(Continued)

ol. 36.		The Morphology, Transmission, and Life-History of Haemoproteus lophortyx O'Roke, a Blood Parasite of the California Valley Quail, by Earl C. O'Roke. Pp. 1-50, plates 1 and 2, 6 figures in text. November, 1930
		The Morphology and Life-Cycle of Oxymonas dimorpha sp. nov. from Nectermes simplicicornis Banks, by Frank H. Connell. Pp. 51-66, plate 3, 2 figures in text. December 1930
		Hypermastigote Plagellates from the Termite Reticulitermes: Torque- nympha octopius gen. nov., sp. nov., and Two New Species of Micro- joenia, by Virginius E. Brown. Pp. 67-89, plates 4-5. December 1936
		The Effect of Diet upon the Intestinal Fauna of Termopsis, by Everett Eugene Lund. Pp. 81-96, 14 figures in text. December 1930
		Notes on the Genus Endosphaera Engelmann and on its Occasional Hest Opisthonecta henneguyi Fauré-Fremiet, by James E. Lynch and Alden E. Noble. Pp. 97-114, plates 6-8, 1 figure in text. February 1931
		A Study of the Species of Eimeria Occurring in Swine, by Dora Prisult Henry. Pp. 115-126, plates 9, 10. February 1931 25
		The Water Exchanges of Living Cells. I. The Normal Permeability of the Eggs of Some Marine Invertebrates, by James L. Leitch. Pp. 127– 140, 7 figures in text. February 1981
		The Morphology of Eupoterion pernix gen. nov., sp. nov., a Holotrichous Ciliate from the Intestine of Acmaea persona Eschecholtz, by Ronald F. MacLennan and Frank H. Connell. Pp. 141-156, plate 11, 2 figures in text. March 1931
		Species of Occidia in Chickens and Quail in California, by Dora Priaulx Henry. Pp. 157–170, plates 12 and 13. April 1931
	- 1	Trichomonad Flagellates from Termites. II. Eutrichomastix, and the Subfamily Trichomonadinae, by Harold Kirby, Jr. Pp. 171-262, plates 14-22, 4 figures in text. May, 1931
		The Life-Cycle of Babesia bigemina (Smith and Kilbourne) of Texas Catal- Fever in the Tick Margaropus annulatus (Say), by Emery Westervelt Tennis Pr. 263-298, plates 23-28, 1 figure in text. January 1932
Vol. 37		Critical Comments on Mammals from Utah, with Descriptions of New Forms from Utah, Nevada and Washington, by E. Raymond Hall. Pp.
		. Hydrostatics of the Suctorial Mouth of the Lamprey, by E. Emmett. 30. Hydrostatics of the Suctorial Mouth of the Lamprey, by E. Emmett. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30
		Veins in the Roof of the Buccopharyngeal Cavity of Squares Sutkin, by J. Frank Daniel and L. H. Bennett, Pp. 35-40, 3 figures in text, June 25
		Features in the Development of Ammocoetes, by J. Frank Damet. Pp. 25
V01. 38), 1	L. A New Pocket Gopher from Southeastern California, by Joseph Grinnell. Pp. 1-10, plates 1 and 2. October 1931
		Systematic Revision and Natural History of the American Burkes (Hadina),
	3	by Aiden H. Miner. Fp. 11-22. Constitution of the California, by Joseph Grinnell. Type Localities of Birds Described from California, by Joseph Grinnell. Pp. 243-324, 1 map. January 1932

TYPE LOCALITIES OF BIRDS DESCRIBED FROM CALIFORNIA

вч

JOSEPH GRINNELL

University of California Publications in Zoology Volume 38, No. 3, pp. 243-324, 1 map

> UNIVERSITY OF CALIFORNIA PRESS BERKELEY, CALIFORNIA 1932

UNIVERSITY OF GALLFORNIA PUBLICATIONS

Note.—The University of California Publications are offered in exchange for the publications of learned societies and institutions, universities and libraries. Complete lists of all the publications of the University will be sent upon request. For sample copies, lists of publications or other information address the MANAGER OF THE UNIVERSITY PRESS, BERKELEY, CALIFORNIA, U. S. A. All matter sent in exchange should be addressed to EXCHANGE DEPARTMENT, UNIVERSITY LIBRARY, REKELEY, CALIFORNIA, U. S. A.

Publications of the University of California Press may be obtained from THE CAMERIDGE UNIVERSITY PRESS, FETTER LANE, LONDON, E. C. 4, ENGLAND, to which orders originating in Great Britain and Ireland should be sent.

ZOOLOGY.—C. A. Kefeid, J. Grinnell, and S. J. Holmes, Editors.

This series contains the contributions from the Department of Zoology, from the Scripps Institution of Oceanography (until 1927), at La Jolia, California, and from the California Museum of Vertebrate Zoology in Berkeley. Beginning in February, 1927, contributions from the Scripps Institution are issued as "Bulletias of the Scripps Institution of Oceanography, Technical Series."

Cited as Univ. Calif. Publ. Zool.

Tolume	4	1902-1905	317 pages	with 28 plat	85		\$3.5
Toluma.	Ø .	1004-1906	xvii + 382 r	ages. with	l9 plates		53.b
Walnus	7	1906_1907	383 pages	with 23 plat	es		\$3.5
Value		1907-1908	400 pages.	with 24 plat	88		\$3.5
Unluma		1908-1910	440 pages.	with 84 plat	68		
Walnes	G.	1008_1011	478 nages	with 48 plat	48		\$3.5
Talmo	7	1910_1912	446 nages	with 12 plat	es	******	
Volume	Q	1911, 357 n	ages. with	25 plates	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Voluma	o.	1911-1912	865 baces.	with 24 play	es		\$3.5
Volume	ī'n.	1912-1913	417 pages.	with 10 pla	tes		\$3.5
Volume	11.	1912-1914	538 pages.	with 26 pla	.tes		
Volume	12.	1913-1916	. 558 pages.	with 22 pla	tes		
Volume	13.	1914-1916	. 529 pages.	with 39 pla	tes		\$5.0
Volume	14	1914-1918	. 452 pages.	with 60 pla	tes	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Volume	15,	1915-1916	360 pages,	with 38 pla	ites	*****	\$4.0
Volume	16,	1015-1917	, 522 pages,	with 46 pla	ites		
Volume	17,	1916-1918	545 pages,	with 24 pla	tes		\$5.0
Volume	18	1917-1919	529 pages,	with 20 pla	itea		
Volume	19,	1919-1920	, 480 pages,	with 33 pla	ites		
Volume	20,	1919-1924	, 571 pages,	with 48 pla	tos		
Volume	21.	1918-1926	, 475 pages,	with 11 pl	ites	************	
Volume	22,	. 1920-1923	, 485 pages,	with 24 pi	ites	*****	\$0.U
Volume	23,	1921, 470	pages, with	ou plates		**************	
					LTCS		
Volume	50,	1024, 514	pages				90.U 95 A
Volume	a to	. 1925-1920	, 405 Pages,	WILL 54 DI	1000		90.U
Aorame	<i>21</i>	1820, 042	pages, watu	10 places			er o
A OTHER	46	1020-1020	, OGA PAKCE,	With the plant	1608	************	98 A
Tralman	0.0	1002 1000	407 maga	with on sit	/00	**************	3 5 0
Talama	64	1007_1000	, TOI PAGPA	with 10 mls	1700	****	85.0
A CHIMIC	***				a Alexandra	Y (1.117.	
A OT' 957"	4.	A DISTRICT	DIODAL BUILD	Marana ar	to Armendinell	of Lower Califo November 1928	
						ildegarde Howa	
	z.	AND STATE	Ulla VI Kuli -lo-sa 1 d	oly ville Cill E Greene te	text. July 192	O MANAGANA TINUM	1.2
	0	Who Pers T	praces in the	A	California by l	oseph Grinnell.	
	٥.	AND AND A	m K 7 Tole	1929	Controller of a	Onches erronnen	.2
		Ostaniaas	as the Cal	ifarnia Ras	d.Runner Rec	ant and Pleistoc	
	7600	Taigh W	rion Large	. De 400_	199 S Appres in	text. January	19302
	ĸ	Notes on t	ha Range :	nd Life-His	tory of the Pa	cific Fresh water	
		Clemmys	marmorata	hy Tracy I	Storer, Pp. 42	29–441. April 19:	302
	A.	Three New	Pocket Go	ohers from	Otah and Neva	da, by E. Raymo	nd Hall,
		Pn 448-4	47 June 1	ดดก			
	7.	Two New	Pocket Mic	. Genus Per	ognathus, from	the Californias,	by Seth
		B. Benso	n. Pp. 449	-455. Sept	mber 1930		
	8.	Adaptive 1	Modification	s in the Wo	odpeckers, by V	Villiam Henry Bi	irt. Pp.
		455-524,	29 figures in	text. Dec	miber 1930		1.0

TYPE LOCALITIES OF BIRDS DESCRIBED FROM CALIFORNIA

BY JOSEPH GRINNELL University of California Publications in Zoology Volume 38, No. 3, pp. 243-324, 1 map Issued January 30, 1932

> University of California Press Berkeley, California

CAMBRIDGE UNIVERSITY PRESS
LONDON, ENGLAND

TYPE LOCALITIES OF BIRDS DESCRIBED FROM CALIFORNIA

BY

JOSEPH GRINNELL

(Contribution from the Museum of Vertebrate Zoology of the University of California)

CONTENTS PAGE Introduction 243 Plan 245 Alphabetical list of type localities 247 Map of California showing type localities 249 Collectors of Californian bird types 257 Museums containing Californian bird types 258 List of original describers 258 Species named definitely from California 259 Hypothetical list 315

INTRODUCTION

The rules of nomenclature require the permanent employment of the first name, of fairly certain application, given to each kind of animal. In the more recent refinements of taxonomy, when it has become desirable to designate by name forms distinguished but slightly from one another, the correct application of any name already proposed in a group requires careful heed to the minor features not only of the type specimen but often additionally to the characters in mass shown by series of specimens from the type locality. Not infrequently a type specimen has become lost or damaged, and then, even more, topotypes are needed to settle the applications of names. In any case, the type locality needs to be known as exactly as possible, often far more precisely as to geographical position than may have been indicated in connection with the original published description or in any subsequent literature.

Ever since my interest became centered in the systematics of the birds of California I have kept note of facts and ideas pertaining to this often vital question of exact type locality; and latterly I have made special effort, in other museums and through correspondence,

the label he wrote. The skin is now no. 2829, U. S. National Museum [examined by me last, forwarded, November 29, 1930].

This bird had thus, supposedly, passed from Townsend through Audubon's hands to Baird, before the present oldest label was written. The characters of the skin show indubitably that it could not have come from Santa Barbara as stated by Audubon (loc. cit.). Also Townsend himself was in the Hawaiian Islands on the date given, and never was in California at all, in so far as I can learn; the month given, too, is impossible for the plumage condition of the bird bearing this label. It is well known that the data accompanying Townsend's specimens were, in many cases, erroneous (fide Ridgway, loc. cit.); it is even not certain that any of them were supplied with labels before leaving Townsend's hands (see Stone, Auk, 47, 1930, p. 415). That the bird could have come from near the mouth of the Columbia River, as suggested by Ridgway, is for several reasons not at all likely. There is no comparable skin from anywhere north of California in either the National Museum or the Museum of Vertebrate Zoology; nor can I match it with any skin from south of Santa Cruz County, California. The type falls in accurately with skins from the San Francisco Bay region. The real collector of the specimen is unknown.

Type locality, "Santa Barbara, California"; but, for reasons given above, with little doubt San Francisco, San Francisco County.

Lophortyx catalinensis Grinnell, Auk, 23, July, 1906, p. 262.

[= Lophortyx californica catalinensis Grinnell.]

Type, male adult; skin in good condition; collected by J. Grinnell, November 25, 1904; orig. no. 6134, coll. J. G.; now no. 32040, Mus.

Type locality, [the canon immediately back of] Avalon, SANTA CATALINA ISLAND, Los Angeles County.

Callipepla gambeli deserticola Stephens, Auk, 12, October, 1895, p. 371.

[=Lophortyx gambelii gambelii Gambel.]

Type, male [not "?"] adult; skin in good condition; collected by Frank Stephens, January 15, 1890; orig. no. 4969, F. S.; now no. 264, coll. San Diego Society of Natural History. [Examined by me January 7, 1930; forwarded.] A female "type" is also designated in the original description, from "Walters" [= Mecca], Colorado Desert, Riverside County; but the first-designated specimen is here considered the type, and hence its place of capture the type locality, as below.

Type locality, PALM SPRINGS, "100" [= 450] feet altitude, Colorado Desert, Riverside County.

Rallus elegans, var. obsoletus Ridgway, Am. Naturalist, 8, February, 1874, p. 111.

[= Rallus obsoletus obsoletus Ridgway.]

Type, skin, in fair condition, taken down from mount; [sex ?] seemingly old adult; collected by Dr. George Suckley in March, 1857; no. 6444, U. S. Nat. Mus. [Examined by me October 26, 1929.]

Type locality, San Francisco, San Francisco County.

Rallus levipes Bangs, Proc. New England Zool. Club, 1, June 5, 1899, p. 45.

[= Rallus obsoletus levipes Bangs.]

Type, female adult; skin in good condition; collected by Frank Stephens, February 23, 1886; orig. no. 2944, coll. F. S.; then no. 678 coll. E. A. and O. Bangs [examined by me February 3, 1922]; now no. 100678, Mus. Comp. Zool. (fide Bangs, Bull. Mus. Comp. Zool., 70, 1930, p. 167).

Type locality, NewPort Landing, "Los Angeles County" [= Orange County].

Rallus yumanensis Dickey, Auk, 40, January [10], 1923, p. 90.

[= Rallus obsoletus yumanensis Dickey.]

Tupe, male adult; skin in good condition; collected by May Canfield, May 15, 1921; orig. no. 229, coll. L. M. Huey; now no. J 1039, coll. Donald R. Dickey. [Re-examined by me, April 15, 1930.]

Type locality, valley of lower Colorado River, near BARD, Imperial

Rallus virginianus pacificus Dickey, Condor, 30, September 28, 1928, p. 322.

= Rallus limicola pacificus Dickey.

Type, male, in first winter plumage; skin in good condition; collected by A. J. van Rossem, December 21, 1913; orig. no. 5967, coll. A. B. Howell; now no. 11337, coll. Donald R. Dickey. [Examined by

Type locality, five miles west of Corona, Riverside County.

Porzana Jamaicensis, var. coturniculus Ridgway, Am. Naturalist, 8. February, 1874, p. 111.

[= Creciscus jamaicensis coturniculus (Ridgway).]

Type, [sex ?], apparently in first fall plumage (see comments by Brewster, Auk, 24, 1907, p. 207); skin in poor condition, taken down from mount; no original data; registered at the Smithsonian Institution, October 13, 1859; received from, though not necessarily collected by, T. C[originally published "G"]. Martin; now no. 12862, U. S. Nat. Mus. [Examined by me October 29, 1929.]

Type locality, Farallon Islands, San Francisco County.

Aegialitis nivosa Cassin, in Baird, Pac. R. R. Repts., 9, 1858, p. 696. [= Charadrius nivosus nivosus (Cassin).]

Type, [sex ?], skin; collected by Lieut. W. P. Trowbridge, May 8, 1854; once no. 6600, U. S. Nat. Mus. (see Stone, Proc. Acad. Nat Sci. Phila., 1899, p. 29). Not now there; the National Museum records show that this specimen was sent to Henry E. Dresser, of England, May 20, 1872 (fide C. W. Richmond, MS).

The Dresser collection found its way into the Victoria University, Manchester (Sharpe, in Hist. Colls. Nat. Hist. Depts. British Mus., 2, 1906, p. 340). I inquired of the present Keeper of the Manchester Museum, Dr. G. H. Carpenter, who thereupon with the kindly assistance of Mr. T. A. Coward instituted search for this type. Under date February 5, 1931, Dr. Carpenter writes me that no trace of the specimen can be found. The Dresser collection reached the Museum in 1898, and it is suggested that, during the 26 years gone by since the type in question was transmitted from the U. S. National Museum, Dresser may have exchanged it or given it elsewhere, not realizing its special value.

Type locality, Presidio, in San Francisco, San Francisco County.

Strepsilas melanocephalus Vigors, Zool. Journ., 4, [January,] 1829, p. 356.

 $[=Arenaria\ melanocephala\ (Vigors).]$

Type: "Two specimens of this bird were . . . brought home by the expedition" (Vigors, Zool. Voyage Blossom, 1839, p. 29). Neither now known to me to exist; apparently not in the British Museum, where they might be expected to be (fide P. R. Lowe, in litt., March 18, 1930).

Type locality, not given in connection with the original description, nor elsewhere that I know of. From among the localities visited by the Blossom, the most likely one, all things considered, from which this species could have been obtained, is Monterey, Monterey County; and this place I therefore now fix as the type locality. The Blossom was there twice, January 1 to 5, 1827, and October 29 to November 17, 1827. The collector of the two specimens "brought home" was doubtless surgeon Alexander Collie.

Ereunetes occidentalis Lawrence, Proc. Acad. Nat. Sci. Phila., "April" [by June 30], 1864, p. 107.

[=Ereunetes mauri Cabanis.]

Type, male, in first nuptial plumage; skin in fair condition. The original Gruber-written label, on ruled blue paper, reads on one side as follows: "Least Sandpiper male. | Tringa Wilsonii. Nuttall. | Collected April 1862 by F. Gruber. | 542 Clay St. below Montgomery. | San Francisco, Cal."; measurements, etc., on other side. Another label is that of "Coll. Geo. N. Lawrence." This bears additionally to part of the above data the word "Type" and also the number "535." Now no. 45562, coll. American Museum of Natural History, New York City. [Forwarded and examined by me, November 2, 1930.]

Type locality, "Pacific coast; California, Oregon" (Lawrence, loc. cit.). More exactly, from above evidence, San Francisco County.

Recurvirostra occidentalis Vigors, Zool. Journ., 4, [January,] 1829, pp. 356-357.

[= Recurvirostra americana Gmelin.]

Type, not known to me to be now in existence; it might have once been in the British Museum, but it is not there now (fide P. R. Lowe, in litt., March 18, 1930).

Type locality: "It was found abundantly at San Francisco" (Vigors, Zool. Voyage Blossom, 1839, p. 28). This was during the visits of the Blossom to that place, November 7 to December 28, 1826, and November 19 to December 3, 1827. The bird figured in the Zoology of the Voyage of the Blossom (pl. 12) is in winter plumage and was doubtless collected during one of those visits, by surgeon Alexander Collie. Hence San Francisco, San Francisco County.

Larus occidentalis wymani Dickey and van Rossem, Condor, 27, July 15, 1925, p. 163.

[= Larus occidentalis wymani Dickey and van Rossem.]

Type, male adult; skin in excellent condition; collected by A. J. van Rossem, May 22, 1925; orig. no. 8329, coll. A. J. van R.; now no. 15250, coll. Donald R. Dickey. [Examined by me April 15, 1930.]

Type locality, Santa Catalina Island, Los Angeles County. More exactly, the small flat islet on the northwest side of this island, just off the cove at the "isthmus" (A. J. van Rossem, MS).

Larus Californicus Lawrence, Annals Lyc. Nat. Hist. New York, 6, March, 1854, pp. 79-80.

[= Larus californicus Lawrence.]

Type, male adult, in winter plumage; skin in fair condition though dirty. The oldest of the three labels bears data as follows: "Coll. Geo. N. Lawrence [printed] | Larus californicus & | California 663 [the Baird Catalogue number] || Presented by | E. S. Holden | — Type — ." Now no. 46070, American Museum of Natural History. [Forwarded and examined by me May 3, 1930.] "The specimen described was presented to me by E. S. Holden, Esq., who shot it on the San Joachin River, near Stockton" (Lawrence, loc. cit.).

Type locality, San Joaquin River near Stockton, San Joaquin County.

Larus Heermanni Cassin, Proc. Acad. Nat. Sci. Phila., 6, "October" [= December 31], 1852, p. 187.

[= Larus heermanni Cassin.]

Type, "cannot be found" (fide Stone, Proc. Acad. Nat. Sci. Phila., 1899, p. 28). "... Discovered by Adolphus L. Heermann, M. D.," probably in 1851; found "most numerous in the harbor of San Diego in the month of March..." (Cassin, Illustr. Birds Calif., Texas, etc., 1856, p. 28). Evidently several specimens were preserved by Heermann; adult and immature are shown on Cassin's plate 5 (op. cit.).

Type locality, "coast of California at San Diego." Hence, San Diego, San Diego County.

Gelochelidon nilotica vanrossemi Bancroft, Trans. San Diego Soc. Nat. Hist., 5, December 10, 1929, p. 284.

[= Gelochelidon nilotica aranea (Wilson).]

Type, male adult, "breeding"; skin in good condition; collected by A. J. van Rossem, May 21, 1928; orig. no. 12278; now no. 22838, coll. Donald R. Dickey. [Examined by me April 15, 1930.]

Type locality, an island in SALTON SEA, Imperial County.

Sterna Pikei Lawrence, Annals Lyc. Nat. Hist. New York, 6, April, 1853, p. 3.

= Sterna paradisaea Brünnich.

Type, "from the cabinet of Nicolas Pike, Esq., of Brooklyn, L. I.". It evidently passed into the possession of George Newbold Lawrence; for Coues (Proc. Acad. Nat. Sci. Phila., 1862, p. 550)